## PERCENTAGE LOG OF WATER-WELL CUTTINGS UTAH GEOLOGICAL SURVEY

DWRi Appropriation #: 08-55-006-M00 Well Owner: Midway City

Location: (D-3-4)22cac, Wasatch County, Utah Win #: 431873

Driller: Midway Drilling Geologist: Janae Wallace, 6/4/09

	Milawa		115			<u> </u>	l	
Ra	Depth Range (feet)		]	PERCI	ENTA	GES		
(1)			unconsol*		con	solidate	d	COMMENTS
		css* gr*		slt* ss/ lime* qz*		igneous		
0	10	0	0	0	0	0	0	no sample
10	15	10	90	0	0	0	0	gray and tan sand and gravel; sand is fine to coarse and consists of feldspar, quartz, mica, hornblende, and rock fragments; gravel is angular and consists of igneous clasts with minor quartzite, and green metamorphic clasts; maximum clast size (MCS) is 1 cm, average clast size (ACS) is 0.5 cm; non calcareous
15	20	10	90	0	0	0	0	"MCS is 0.5 cm, ACS is 0.3 cm
20	25	tr	100	0	0	0	0	gray and tan gravel; gravel is angular and consists of igneous clasts with minor quartzite, and sandstone; MCS is 0.5 cm, ACS is 0.5 cm; trace clay; non calcareous
25	30	tr	100	0	0	0	0	"MCS is 2 cm, ACS is 2 cm
30	35	tr	100	0	0	0	0	"MCS is 2 cm, ACS is 0.5 cm
35	40	tr	100	0	0	0	0	"MCS IS 1.5 cm, ACS is 1 cm
40	45	tr	100	0	0	0	0	"MCS is 2 cm, ACS is 0.5 cm
45	50	tr	100	0	0	0	0	"MCS is 2 cm, ACS is 1 cm
50	55	tr	100	0	0	0	0	"MCS is 1.5 cm, ACS is 0.5 cm

<sup>\*</sup>unconsol=unconsolidated; css=clay, silt, and sand; gr=gravel; slt=siltstone; ss=sandstone; qz=quartzite; lime=limestone

Ra	Depth Range (feet)		]	PERCI	ENTA	GES		
(fe			unconsol*			solidate	d	COMMENTS
			gr*	slt* ss/ qz*		lime* igneous		
55	60	2	98	0	0	0	0	"MCS is 1.5 cm, ACS is 1 cm
60	65	0	100	0	0	0	0	gray and tan-white gravel; gravel is angular and consists of igneous clasts, quartzite, and sandstone; MCS is 1.5 cm, ACS is 1 cm; non calcareous
65	70	2	98	0	0	0	0	orange, white, gray, and tan gravel; gravel is angular and consists of igneous clasts with minor quartzite and sandstone; MCS is 2 cm, ACS is 0.5 cm; minor clay; non calcareous
70	75	5	95	0	0	0	0	"MCS is 1.5 cm, ACS is 0.5 cm
75	80	tr	100	0	0	0	0	"trace clay; MCS is 1 cm, ACS is 0.5 cm
80	85	20	80	0	0	0	0	gray and tan gravel and clay, silt, and sand; gravel is angular and consists of igneous clasts with minor quartzite, and sandstone; MCS is 0.5 cm, ACS is 0.5 cm; non calcareous
85	90	50	0	0	50	0	0	orange and brown clay, silt, and sand with gray, yellow, and tan sandstone and quartzite; contact between alluvium and Weber Quartzite?
90	95	50	0	0	50	0	0	gray and yellow sand and sandstone and quartzite; Weber Quartzite?
95	100	50	0	0	50	0	0	
100	105	20	0	0	80	0	0	
105	110	20	0	0	80	0	0	"
110	115	20	0	0	80	0	0	66

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(fe			nsol*		con	solidate	d	COMMENTS
			css* gr*		slt* ss/ lime* qz*		igneous	
115	120	0	0	0	100	0	0	tan, yellow, pink, and gray quartz-rich sandstone and minor quartzite; non calcareous
120	125	0	0	0	100	0	0	"
125	130	0	0	0	100	0	0	
130	135	0	0	0	100	0	0	
135	140	2	0	0	98	0	0	yellow clay and tan-gray quartz-rich sandstone; calcareous
140	145	5	0	0	95	tr	0	"trace limestone
145	150	0	0	98	0	2	0	purple, gray, and yellow siltstone and limestone; slightly calcareous
150	155	0	0	100	0	tr	0	" purple, red, and minor orange siltstone; trace limestone; non calcareous
155	160	0	0	100	0	0	0	" no limestone
160	165	0	0	0	100	0	0	gray-tan and yellow quartz-rich sandstone and quartzite; slightly calcareous
165	170	0	0	0	100	0	0	•
170	175	0	0	0	100	0	0	
175	180	0	0	0	100	0	0	
180	185	0	0	0	100	0	0	"
185	190	0	0	0	100	0	0	"
190	195	0	0	0	100	0	0	"

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(fe			unconsol*		con	solidate	d	COMMENTS
		css* gr*		slt*	ss/ qz*	lime*	igneous	
195	200	2	0	0	98	tr	0	yellow and gray quartz-rich sandstone and quartzite with minor yellow clay; trace limestone; non calcareous
200	205	2	0	0	98	tr	0	66
205	210	0	0	0	100	tr	0	" no clay
210	215	95	0	tr	5	tr	0	gray clay with quartz-rich sandstone and trace gray shale and limestone; non calcareous; fault zone?
215	220	98	0	tr	2	tr	0	"
220	225	98	0	tr	2	tr	0	66
225	230	95	0	tr	5	tr	0	66
230	235	90	0	tr	10	tr	0	66
235	240	60	0	tr	40	tr	0	"
240	245	0	0	tr	80	0	20	yellow, tan and gray quartz-rich sandstone and quartzite with trace purple siltstone; minor igneous fragments composed of feldspar, mica, and hornblende (dike?); non calcareous—per driller's log from 240-275' represents "lost circulation," hence, these samples likely do not represent the true 5' intervals
245	250	0	0	0	80	0	20	"no siltstone
250	255	0	0	0	80	0	20	"
255	260	0	0	0	80	0	20	"
260	265	0	0	0	90	0	10	"

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Ra	pth nge		]	PERCI	ENTA	GES		
(fe	(feet)		unconsol*		con	solidate	d	COMMENTS
			gr*	slt*	ss/ qz*	lime*	igneous	
265	270		0	0	90	0	10	46
270	275	0	0	0	90	0	10	66
275	280	0	0	0	100	0	0	gray-tan quartz-rich sandstone and quartzite; non calcareous
280	285	0	0	0	100	0	0	" yellow and tan
285	290	0	0	0	100	0	0	٠٠
290	295	0	0	0	100	0	0	"
295	300	0	0	0	100	0	0	"
300	305	0	0	0	100	0	0	"
305	310	0	0	0	100	0	tr	" trace igneous fragments
310	315	0	0	0	100	0	tr	"
315	320	0	0	0	100	0	tr	"
320	325	0	0	0	100	0	0	" no igneous fragments
325	330	0	0	0	100	0	0	"
330	335	0	0	0	100	0	0	"
335	340	0	0	0	90	10	0	٠.
340	345	0	0	0	98	2	0	" minor limestone; calcareous
345	350	0	0	0	100	0	0	" no limestone
350	355	0	0	0	100	0	0	"
355	360	0	0	0	100	0	0	"

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(f			unconsol*		con	solidate	d	COMMENTS
		css*	gr*	slt*	ss/ qz*	lime*	igneous	
360	365	0	0	0	50	0	50	tan, gray, white, and yellow sandstone and igneous rock composed of feldspar, hornblende, mica, and green minerals; dike?; calcareous
365	370	0	0	0	95	tr	5	white-gray and minor yellow sandstone and minor igneous material; trace limestone; calcareous
370	375	0	0	0	98	2	tr	yellow, gray, and pink quartz-rich sandstone and quartzite with minor limestone; calcareous
375	380	0	0	0	100	0	0	yellow, gray, and pink quartz-rich sandstone and quartzite; calcareous
380	385	0	0	0	100	tr	0	"trace limestone
385	390	0	0	0	100	tr	0	
390	395	0	0	0	100	tr	0	"
395	400	0	0	0	100	tr	0	"
400	405	0	0	0	100	tr	0	
405	410	0	0	0	100	tr	0	
410	415	0	0	0	100	0	0	
415	420	0	0	0	100	tr	0	yellow, gray, and tan sandstone; calcareous; trace limestone
420	425	0	0	0	100	tr	0	"
425	430	0	0	0	100	tr	0	
430	435	0	0	0	100	tr	0	"

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Ra	Depth Range		]	PERCI	ENTA	GES		
(feet)		unconsol*			con	solidate	d	COMMENTS
		css*	gr*	slt*	ss/ qz*	lime*	igneous	
435	440	0	0	50	50	tr	0	brown-purple siltstone with yellow, gray, and tan sandstone and quartzite; trace limestone and gypsum; calcareous
440	445	0	0	50	50	tr	0	"
445	450	0	0	50	50	tr	0	"
450	455	0	0	25	75	tr	0	•
455	460	tr	0	25	75	tr	tr	" trace igneous fragment and pink clay
460	465	tr	0	25	75	tr	tr	•
465	470	tr	0	20	80	tr	tr	•
470	475	tr	0	20	80	tr	tr	•
475	480	tr	0	8	90	2	tr	" minor limestone
480	485	tr	0	2	94	2	tr	" trace chert
485	490	tr	0	0	98	2	tr	"
490	495	tr	0	0	95	5	tr	
495	500	tr	0	0	95	5	tr	
500	505	tr	0	0	90	10	tr	"
505	510	tr	0	0	90	10	tr	"

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